## Semiconductor device

## **Abstract**

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A semiconductor device comprises a substrate (11) having an insulating layer (12) formed on a surface thereof, and a silicon layer (13) located on a surface of the insulating layer. A trench (14) extends from a surface of the silicon layer (13) through the insulating layer (12) and into the substrate (11). An insulating liner (14a) is located on the side walls and the base of the trench (14), and an in-fill (14b) of thermally-conductive material is formed within the insulating liner. The insulating liner (14a), the in-fill material (14b) and the distance over which the trench 14) extends into the substrate (11) are such as to promote flow of heat from the silicon layer (13) to the substrate.